UNITED NATIONS

TD

United Nations Conference on Trade and Development

Distr.
GENERAL

TD/B/CN.4/GE.1/6
9 February 1996

Original: ENGLISH

TRADE AND DEVELOPMENT BOARD
Standing Committee on Developing Services
Sectors: Fostering Competitive Services
Sectors in Developing Countries - Shipping
Intergovernmental Group of Experts on Ports
Second session
Geneva, 18 March 1996
Items 3 and 4 of the provisional agenda

PORT ORGANIZATION AND MANAGEMENT

Report by the UNCTAD secretariat

CONTENTS

Chapter			Paragraphs
		Introduction	(i) - (iv)
I.		Port modernization and development (agenda item 3)	1 - 29
II.		Training and technical assistance (agenda item 4)	30 - 35
III.		Conclusions	36 - 39

GE.96-50188

INTRODUCTION

(i) At its first session, in November 1992, the Standing Committee on Developing Services - Shipping gave the UNCTAD secretariat the following mandate in the field of ports:

To promote transparency:

* *Collect and disseminate information on technological and structural changes in ports;*
* *Collect and disseminate information on measures affecting port services, with a view to enhancing the participation of developing countries in these areas;*

To foster competitive maritime transport services:

* *Undertake comparative analysis of the port sector and related policies in different countries to determine the factors which can contribute to a better management, efficiency and sustainable development of ports and related port services;*
* *Assess the potentialities for increased regional cooperation and improve the circulation of information amongst ports;*

To strengthen human resource development:

* *Draw up programmes further contributing to efficient conduct of port management operations;*
* *Organize policy seminars and workshops to disseminate the findings of UNCTAD studies and to train officials to plan and manage work effectively in maritime related activities.*

To strengthen technical cooperation:

* *Provide advice and assistance in the managements of ports.*

(ii) The specialized nature of the subjects discussed and their importance for the fostering of trade and development of countries led the Standing Committee on Shipping to appoint a subsidiary body, namely the Intergovernmental Group of Experts on Ports, which held its first session in October 1993. The Standing Committee at its second session took the view that the Group had made an important contribution to the implementation of the approved work programme, and requested the secretariat to convene a second session of the Group of Experts in early 1996 to assess the progress made in implementing the work programme, to review any new or outstanding issues in the fields of port efficiency, modernization and development, and to make recommendations to the Committee.[1]

(iii) The implementation of the work programme is described in chapters I and II of this report. Chapter I covers the research made by the secretariat by itself or in collaboration with other United Nations agencies or port authorities since the first session of the Group, while Chapter II describes the training and technical assistance activities. During this period the permanent staff of the secretariat working in the field of ports was reduced by one third, from three to two in September 1994, and an experienced extra-budgetary staff member left to join the World Maritime University in January 1995 and was replaced after four months by another non-permanent staff member.

(iv) As was done for the first session of the Group, presentations on subjects of interest will be made during the course of the second session which would provide the opportunity for delegations from developing countries to receive information and raise questions on current developments in ports. This meeting, which is attended by officials from governments, industry and regional bodies, provides a global forum for discussion on policy and economic issues of port development. The provisional agenda for the second session focuses on factors affecting the performance of ports, particularly institutional and

---

[1] Report of the Standing Committee on Developing Services Sectors: Fostering Competitive Services Sectors in Developing Countries - Shipping on its second session (TD/B/41(1)/9-TD/B/CN.4/39), annex I, para.11.

financial ones, as well as human resources development. While focusing on these two issues, the Group would review the reports prepared by the secretariat and the training and technical assistance activities carried out by it. It is expected that the Group will comment on the applicability and dissemination of the reports and provide guidance on key issues to be considered in any future work programme and orientation for the training and technical assistance activities.

I. PORT MODERNIZATION AND DEVELOPMENT

1. Modern and efficient ports are necessary and powerful tools for facilitating and fostering trade and development and more so at a time of globalization of trade. Nowadays, ports must offer efficient and reliable services to ships and cargo, including documentation and customs procedures, to allow the timely flow of goods through the transport chain which has, in fact, become a production chain. To assist in this flow, some countries have developed distribution or logistics centres in the port area which are used for the storage, preparation and transformation of cargo. Therefore, ports are no longer simply a place for cargo exchange but are a functional element in the dynamic logistics chains through which commodities and goods flow. Ports can be a crucial element in developing a competitive advantage for a country and therefore governments and port authorities need to adopt suitable port policies to allow the nation to reap this potential benefit.

2. World trade and international transport are highly competitive and the same environment exists in ports. To survive and prosper in such circumstances, port management needs to be flexible, pro-active, autonomous and accountable for its operational and financial performance. Ports are often a place in which international market forces interact with national economies and in which the ability of the public sector to cope with them is tested. Governments have to steer a careful course to meet these challenges in order to take advantage of opportunities created by international trade and technological development while taking into consideration the level of social and economic development of the country. The importance of transport for the facilitation of trade was highlighted in the United Nations International Symposium on Trade Efficiency held in Columbus, Ohio which recommended that governments encourage commercial practices and private investment in transport. In a few less fortunate countries in which the national fabric has collapsed, it is vital to revitalize the port sector in order to rebuild the national administration and economy of these countries.

3. The research conducted by the secretariat in response to the requests made at the first session of the Group in 1993 aims to help port decision-makers to make informed decisions to take advantage of the opportunities. This research can be divided into three groups. The first group is made up of studies prepared by the secretariat on the following topics:

- Strategic port pricing (UNCTAD/SDD/PORT/2)
- Comparative analysis of deregulation, commercialization and privatization of ports (UNCTAD/SDD/PORT/3)
- Financing port development (UNCTAD/SDD/PORT/4)
- Potentialities for regional port cooperation (UNCTAD/SDD/PORT/5).

The second group is made up of the Monographs on Port Management, which are prepared by senior managers from port authorities with the participation of the secretariat, and reports prepared in collaboration with other agencies such as IMO. The monographs prepared or under preparation are:

- Marketing promotion tools for ports (UNCTAD/SHIP/494(12))

- Freeport development: the Mauritius experience (UNCTAD/SHIP/494(13))
- Sustainable development strategies for cities and ports (UNCTAD/SHIP/494/(14)).

Finally, the third group is made up of the Newsletters prepared by the secretariat twice a year. Since the last meeting, Newsletters 11, 12, 13 and 14 have been distributed and the next Newsletter will be issued in May 1996.

4. This research complements the six reports presented to the first session of the Group of Experts and, in fact, can be regarded as an updating of the research conducted during the 1970s by the secretariat, which is used by practitioners and universities worldwide. This updating was necessary to reflect the competitive environment in which modern ports are now functioning and to make port managers aware of the opportunities resulting from changes in trade and transport. The following sections provide an introduction to the documents prepared by the secretariat in the period November 1993 to February 1996.

A. Strategic port pricing

5. This report, which updates the one prepared in 1975,[2] advocates the use of pricing by ports as a mechanism for achieving competitive advantage. It assumes that ports have and follow a strategic plan and therefore presents pricing as a tool that can help port authorities and operators to achieve their operational, financial and marketing objectives. For instance, the operational target fixed by a terminal operator to achieve 18 units per hour per crane when working fully-cellular container ships can be complemented by a combination of sanctions and incentives: for example, a high berthing charge for vessels at berth and not working and rebates to those that start to work immediately after berthing. Obviously, pricing is used to generate enough funds to cover running expenses and part of the development costs of the port and to encourage or discourage the use of facilities.

6. The report presents the CPV approach (cost, performance, value) to tariffs in recognition of the different objectives that may be served by individual tariff items. Thus, it suggests the cost approach be used for stevedoring services as this will achieve the marketing objective to maximize the use of port services and the financial objective of covering the variable costs of this service. The performance approach is proposed for example for transit storage as it promotes efficient behaviour by users: low tariff to attract users when occupancy is low and a high one to discourage them and avoid congestion when occupancy is high. Finally, the value approach is proposed for general tariffs or dues such as wharfage, conservancy, etc., for which the relevant measure of the user's willingness to pay is given by the elasticity of demand. This CPV approach allows port authorities and operators to recover, through the items assessed by the value approach, the shortcomings in revenue that may arise by the use of the other two approaches and thus achieve the overall financial objective of covering operating expenses including amortization costs.

7. The process of tariff revision is discussed including the need for a balanced internal and external effort by the port authority. The internal effort requires adequate accounting and cost control systems, as well as action by the departments involved to provide the time and expertise needed to collect and analyse the necessary information. The external effort relates to the interaction of the port authority with government and users to present, consult, negotiate and obtain acceptance of the proposed changes in time and without undue opposition of the interested parties. The tariff revision should be considered as a public relations exercise in which the message is that the benefits that will accrue to the port authority

---

[2] *Port pricing* (TD/B/C.4/110/Rev.1), 1975.

are compensated by improvements in the services rendered to users and that the trade-off between tariff items is acceptable to all.

B. Comparative analysis of deregulation, commercialization and privatization of ports

8. This topical subject stems from the enthusiasm, interest and concern shown by participants at the first session of the Group of Experts in 1993. The recognition that open trade is an engine for economic growth and development is now accepted in most countries and has called into question the low productivity, high costs and lack of flexibility of ports to cope with the needs of importers, exporters and transport operators. In most cases the objective of the reform of the port sector is to make the port management market-oriented and thus enable it to satisfy its clients' needs subject to meeting its financial objectives.

9. The report reviews four methods that can be used by governments to achieve this broad objective. They are managerial, deregulation, commercialization and privatization, with each method being progressively more difficult to apply. The first one consists of the application of proven management techniques, already in use in other industries, to the port organizations in the country. Decentralization of decision-making, control by objectives and performance agreements are key elements of this method, which has been used in Casablanca (Morocco).

10. Deregulation is the reduction or removal of existing regulations that protect vested interests and thus precludes the play of market forces. It has been used in several countries, notably Chile and the United Kingdom, in relation to labour but it can also be used to encourage company competition, for example by awarding concessions for container terminals to multiple operators rather than a single State company. Commercialization is used by governments willing to use their ports to pursue macro-economic objectives but who want to do it efficiently. Therefore, the port organization must be financially viable and operate commercially, including setting up autonomous business units. New Zealand and Morocco offer examples and show that maintaining motivation and dynamism is a crucial element in the success of this alternative.

11. Privatization is broadly defined, and ranges from leasing to outright sale of assets. The alternatives of joint-ventures between public and private bodies and the all-private solution in relation to the provision of facilities and services are also discussed. Important aspects such as the need for consensus among the parties, the political will and the financial viability for the success of this method are highlighted. In the majority of cases different methods are used according to the conditions in the country at a given moment and its evolution with time.

12. Port authorities should regard the implementation of these methods as a continuing process. After the measures for managerial improvement have been implemented for a certain period, three results are possible: large and permanent improvements, small and temporary improvements, or deterioration. Positive results can be expected within a year or two when the port's performance will start to improve. This means that the measures are appropriate and, if the performance is sustainable, sufficient for an effective port reform. No notable improvement could mean either (i) that the measures were taken for creating necessary conditions for more radical reforms (for example, management modernization or deregulation have been implemented in many ports as preparatory steps for further reforms like commercialization or privatization), or (ii) that the measures were inappropriate for the port. In both cases, other restructuring measures are needed.

13. In fact, an efficient and competitive port is always changing -- from managerial modernization to technological innovations to institutional adjustments. For example, the port of Singapore is planning

a privatization programme and the port of Antwerp is undertaking a commercialization programme for its port authority. This surge of port restructuring is occurring not only in developed countries but also worldwide. If ports are always to be vital and efficient, changes, including institutional changes, and adaptation should be a continuous process.

C. Financing port development

14. The report on this subject was prepared in response to the recommendation to undertake an analysis of the financial aspects of port management. It concentrates on the financing of port development, which is a topical subject with far-reaching implications as a recent survey carried out by the International Association of Ports and Harbors (IAPH) found that one of the major concerns of port managers was the financing of port facilities. In both developed and developing countries, fiscal crises exist at the local, State or federal level and, at the same time, there is a need for ongoing investment if facilities are to keep up with the growth in trade and provide the services required for efficient transport services.

15. In the past, ports have depended on municipal, State or national funds as well as loans from international development banks to finance their investments. However, the trend has been to reduce the role of the public sector in ports, so that ports must now look more to private sector financing for some or all of their development needs. In order to be financially attractive they must obviously be generating enough revenue to cover their operating costs and to cover the repayment of loans. At the same time they must be able to satisfy their clients with the quality of their services and tariffs and thus demonstrate to their bankers that future growth is assured. Also, institutional reform in the port sector in many countries has created the opportunity to use private funds and other forms of innovative funding for port development.

16. The development of ports requires infrastructure, marine and cargo handling equipment, inland connections, information and communication systems and qualified human resources. On the assumption that a one-berth container terminal can handle 100,000 TEUs per year and that growth of trade will continue at the same rate, the estimated capital investment required for container handling facilities in developing countries to the end of the century will be approximately US$ 12,900 million.[1] In a major departure from traditional funding this amount will very likely be invested by two different parties: port authorities and port operators.

17. The report considers the various alternatives that are open to governments to finance port development. A number of countries are now funding port development by a mixture of public and private finance, notably those undertaking the transfer of activities from the public to the private sector. Therefore, the relevant parties are the port authority and, increasingly, the port operators. Foreign direct investment is playing an important role, notably through some large stevedoring and cargo handling companies which have now become international and act, often through joint-ventures with local partners, as port operators. Other countries continue to use multilateral sources which emphasize the role of ports in economic development. Governments should allow port authorities to seek alternative ways of finance which are consistent with the overall governmental objectives.

---

[1] A rough calculation can be made of the new container handling facilities required. With container traffic growing annually by some 16 per cent in developing countries, throughput should double in slightly less than five years. The port throughput of developing countries in 1993 was 43 million TEUs based on information from Containerisation International Yearbook 1995. The estimated capital cost for a container terminal is US$ 30 million excluding the cost of land with about US$ 13 million for civil works and US$ 17 million for equipment.

D. Potentialities for regional port cooperation

18. The subject of cooperation among ports is a long-standing one in the meetings of the Intergovernmental Group of Experts on Ports. The conclusions of the meetings of 1986 and 1990 show that cooperation among ports is well developed in the spheres of training, the exchange of local know-how, standardization of statistics and tariffs, and participation in the activities of regional and international port associations. In the meeting of 1993, it was agreed that, inter alia: "regional cooperation among ports has been achieved in some areas and proven to be useful. The Group recommends that UNCTAD identify and document where and in what form these cooperative efforts exist, the areas of activity covered and the value identified by the participants".[4] Cooperation is also promoted by UNCTAD and other United Nations agencies active in the ports field.

19. This report examines the potentialities for regional cooperation in a comprehensive way. It starts by reviewing the different elements that come into play: a region is defined broadly as the group of countries which share common and perhaps cultural interests while cooperation is regarded as a win-win situation by the parties engaged in it. In the field of ports the different parties likely to participate are the following: port authorities, port operators, port associations, Ministries and government agencies with responsibilities for ports, land and sea carriers, shippers and training institutions.

20. The report classifies cooperation at three levels - institutional, industrial and commercial - and points out the increased importance of the commercial one in recent years. Institutional cooperation is important and flourishing particularly with the setting up of trading blocs, and industrial cooperation is also very significant with the active involvement of port authorities and other bodies in port associations. However these levels of cooperation are secondary to the profit and efficiency-seeking commercial cooperation being witnessed in many ports with the establishment of private sector port operators and joint-ventures.

21. There are many reasons for this growth in commercial cooperation. They include the globalization of transport networks which has increased transhipment activities where some ports suddenly reap substantial traffic increases; the consolidation of cargo handling activities in large stevedoring companies, some of them with international coverage, which may be part of larger companies; the redefinition of the role of the public sector which is no longer regarded as the sole source of funding development schemes nor the natural provider of port services; and other reasons such as pressures for reducing uncertainty, achieving sustainable development, etc. In weighing the advantages of cooperation against the risks of reducing competition, it is generally concluded that in the ports field reduced competition is not a threat.

22. The cooperation carried out by ports can be seen as a continuum ranging from informal cooperation when representatives exchange information to higher degrees of cooperation such as participating in working meetings, lobbying and exchange of services on a non-profit basis. It can then go to more significant items such as joint training or dredging, harmonization of tariff structures or statistics, the sale of consultancy services on a profit basis and finally joint ventures, often with a component of foreign direct investment.

23. The report makes reference to the role of UNCTAD in fostering cooperation through its assistance in setting up port associations and more recently assistance in the rehabilitation of war-torn countries by using expertise from countries with a similar level of socio-economic development. The report also provides a list of port associations, their members and objectives.

---

[4] *Report of the Intergovernmental Group of Experts on Ports* (TD/B/CN.4/28), annex I, para.6.

E. Monographs on Port Management and Joint Report with IMO

24. The secretariat has continued to cooperate with the International Association of Ports and Harbors (IAPH) to publish the UNCTAD Monographs on Port Management. These monographs, which are prepared by experts on a no-charge basis and are edited and published by the secretariat in English, French, Spanish and Arabic, provide information to managers on current port issues. They are distributed via the informal network and sold to interested parties through the official channels. The latest Monograph, entitled *Marketing promotion tools for ports* (UNCTAD/SHIP/494(12)), has been prepared by a manager from the port of Ghent (Belgium). Another Monograph, *Freeport development: the Mauritius experience* (UNCTAD/SHIP/494(13)), based on information provided by managers from the freeport in Port Louis (Mauritius), will be published shortly.

25. Another report in this series on the subject of sustainable development strategies for cities and ports has been prepared by managers from the Santander Port Authority (Spain) and will be the first to be published in collaboration with the International Association Cities and Ports. The subject is important in view of the obsolescence of port facilities due to technological changes and takes into consideration inland environmental features.

26. Work on sustainable development has involved a joint approach with IMO. In fact, the subject is related to chapter 17 of Agenda 21 of the United Nations Conference on Environment and Development which calls on States to take necessary measures to prevent further degradation of the marine environment. In particular it requested that the necessary measures be taken to facilitate the establishment of port reception facilities for the collection of oil and chemical residues and garbage from ships as defined by the annexes of MARPOL 73/78. Therefore, cooperation has been initiated between UNCTAD and IMO aimed at designing a financial instrument that would ensure the funding of investments and operations of waste reception facilities in ports. A jointly prepared document entitled "Reception Facilities" (SPI 3/4) was submitted to the third meeting of the Ship/Port Interface (SPI) Working Group held at IMO, 24-28 October 1994. The document proposed the establishment of a fund for reception facilities, structured and organized on the principle that the "polluter pays", to give an incentive to ships to use facilities. The SPI Working Group noted the requirements that need to be met and established a correspondence group to further develop the scheme in line with these requirements. The UNCTAD secretariat is a member of the correspondence group.

27. The correspondence group has drawn up a set of draft regulations which would require a government co-ordinating or planning body to ensure the establishment and operation of reception facilities adequate for the needs of ships calling without causing undue delay. The waste fee would cover all costs related to the reception and further handling of wastes; it would be linked to the waste category and be irrespective of the amount delivered. Fee deductions can be granted for environmently friendly ships. The IMO Working Group on Ship/Port Interface and the IMO Marine Environment Protection Committee are dealing with this issue.

F. Port Newsletters

28. To complement the publication of technical reports, four issues of the *Ports Newsletter* have been published since the last session of the Group of Experts, i.e. in March and November 1994 and in May and November 1995. In addition to a review of UNCTAD's work in the ports field, they included technical information on the most recent developments of direct interest to ports. The *Newsletter* is distributed to an informal network of 350 correspondents in over 160 countries and fourteen issues have been prepared since 1987. The Newsletter is produced in English and translated into French by the

TRAINMAR Centre in Guadeloupe (France) and into Spanish by the port authority of Valencia (Spain), with the port authority of Dunkirk printing and distributing each issue.

29. Also, on a routine basis the secretariat continues to reply to frequent requests for UNCTAD port publications and training materials from both developing and developed countries. In 1993, for example, there were 60 requests, in 1994 they increased to 103 and in 1995 there were 244 requests, of which about 200 were satisfied free-of-charge. This growth in demand is an indication of the success of the Newsletter in reaching port managers and making them aware of the work of the secretariat.

II. TRAINING AND TECHNICAL ASSISTANCE

30. Since 1993, no new training programmes have been added to the existing inventory of courses/seminars. Rather existing courses have been updated on an ad hoc basis for specific deliveries. A large array of research now exists that could form the basis of policy seminars to help countries to modernize their ports, but no resources are available to develop and disseminate further policy seminars on Improving Port Performance. Training activities have concentrated in the delivery of port management seminars in cooperation with the World Martime University and through extra-budgetary funding from Belgium for the organization of seminars in the ports of Antwerp and Ghent. Occasionally, training activities are conducted within the TRAINMAR network or in response to individual requests, such as for Lisbon.

31. In the field of port management training, secretariat staff have been involved in the following seminars since the previous session of the Group of Experts:

(a) Container Terminal Planning and Port Equipment Management (April 94) - eighteen MSc students from World Maritime University in Malmo, Sweden.

(b) New Commercial Role of Ports and Port Marketing (April 94) - seventeen managers from eleven developing countries (French speaking) in Ghent, Belgium.

(c) Strategic Planning for Port Managers (July 94) - eighteen MSc students from World Maritime University in Malmo, Sweden.

(d) New Commercial Role of Ports and Port Marketing (October 94) - nineteen managers from thirteen developing countries in Ghent, Belgium.

(e) Container Terminal Management (October 94) - fourteen managers from nine developing countries in Antwerp, Belgium.

(f) Container Terminal Planning (March 95) - eighteen managers from Portuguese ports in Lisbon, Portugal.

(g) Container Terminal Planning (May 95) - twenty MSc students from World Maritime University in Malmo, Sweden.

(h) Challenge of the Third Generation Port (June 95) - fourteen managers from Mozambique in Maputo.

(i) Container Terminal Management (September 95) - fourteen managers from eleven developing countries (French speaking) in Antwerp, Belgium.

(j) New Commercial Role of Ports and Port Marketing (October 95) - seventeen managers from fifteen developing countries in Ghent, Belgium.

32. The seminars organized and delivered in Belgium by the secretariat staff have been made possible thanks to the generous funding of the Belgian Government. The participation of the secretariat staff in the WMU is a collaboration with IMO training activities, while the participation in the seminars organized

in Africa is a collaboration with the UNCTAD TRAINMAR programme. Collaboration with the latter is also ongoing to develop materials for a certificate course in modern port management with the financial assistance of the French and Belgian Governments. Other training-related activities undertaken by the secretariat have been to finalize a one-week policy seminar on port pricing based on the research carried out by the secretariat in this field and also to begin development work on a policy seminar on quality management for ports.

33. The secretariat has carried out a survey of training needs for port managers to identify and set priorities in areas of key importance. By the end of January 1996, 119 replies to the questionnaire had been received from 29 different focal points. Eighty per cent of the replies were provided by port authorities from developing countries. Strategic planning clearly is a first priority in training for port managers, followed by quality management and financing. Concerning the duration of seminars, port managers from developed countries favour short and intensive training courses at the national level, while most managers from developing countries prefer longer training sessions abroad for various valid reasons. The involvement of international organizations remains vital for this type of training but port authorities are putting more and more emphasis on training through in-house financing. The replies to the questionnaire are currently being analysed and an oral report will be made to the Group. Moreover, a comprehensive analysis of the replies will be published in the next Ports Newsletter.

34. In the field of technical assistance a major project funded by the United Nations Development Programme for the rehabilitation of ports in Somalia has been under way since June 1993. Management teams provided by the project have had responsibility for the commercial operation of the ports of Mogadishu and Kismayu and have also provided assistance to the port of Berbera. Since the withdrawal of UNOSOM II, work has continued with a small team based in Nairobi. With the assistance of the project, Boards of Directors have been established in the ports of Berbera and Bosasso and initial steps have been taken in Kismayu. Training activities for port staff in Berbera have started using experts from Indian ports.

35. This project is being carried out successfully in a difficult environment typical of war-torn countries. Other countries that are in a similar situation have requested assistance which could not be given for lack of funds. To have a balanced development in the ports field, work similar to the Somali project should be continued in other countries making use of personnel from developing countries.

III. CONCLUSIONS

36. UNCTAD's work in assisting port development in developing countries began in the late 1960s and has made effective and practical contributions to the international port community, particularly in developing countries. Its reports, studies and monographs are regarded by practitioners as major references in the port field; they continue to provided guidelines for governments and port authorities for port policy and development, and have often been the core for human resource development programmes. The steady and growing demand for these documents and requests for training courses are an indication of the effectiveness of the UNCTAD work in the ports field in general and of the current programme in particular. This demand also comes from the private sector, notably from consulting companies providing managerial inputs and training on a commercial basis or bilateral assistance packages, often using material produced by UNCTAD. Another likely reason for the demand is that there are numerous countries whose port organizations lack the ability to study the latest developments in ports and to train their staff in the modern techniques of port management and which therefore rely on the recognized UNCTAD expertise.

37. Further, UNCTAD's contribution to the ports sector is probably the only United Nations interregional approach targeted to the technical and economic issues faced by managers and government officials responsible for ports. Other United Nations organizations are providing inputs on a partial basis to this important sector, often in collaboration with UNCTAD. The IMO through the WMU is providing training on navigational aspects in ports, handling of dangerous goods and related security. This is being complemented by UNCTAD, which also provides inputs on management and economic aspects of ports. The ILO, through its technical cooperation programme, is providing training for dock workers. The United Nations Economic Commissions are also making inputs at the regional level. These activities follow those of the port industry, which is characterized by the coexistence, and successful functioning, of worldwide and regional port associations which retain both the global features of international trade and maritime transport as well as the peculiarities of each trading region. Some of UNCTAD's major technical assistance programmes can use ports to develop trade points and to monitor transport chains as port authorities are often solid organizations with good communication links and foreign-exchange resources and can thus be a strong partner for important undertakings in the transport domain.

38. Preliminary conclusions are that this port development programme, benefiting from the available in-house experience, has been successful and has made a positive contribution to the development of ports in developing countries. It has adapted to the widely different needs of countries, which range from port development for serving modern and global international trade to managing ports for supporting humanitarian and peace-keeping operations undertaken by the United Nations. The programme has prepared and disseminated port studies that provide information to improve the competitiveness of port and port-related services. It has substantially contributed to strengthening human resource development and has provided advice and assistance in the management of ports. A trust fund, Improving Port Performance (INT/83/A04), was set up to produce and distribute training materials and could be further used for this purpose.

39. The future orientation of this programme could concentrate on helping international ports to reach a minimum standard of performance and to better integrate the national economy with international trade. In particular, the effects of institutional restructuring on performance should be monitored, as well as the financing of infrastructure. This information should continue to be disseminated via the Ports Newsletter. Finally the secretariat's activities in port management training should be continued with new port management policy seminars being developed and where possible strengthened through extra-budgetary funds.